



I600

RAW SEQUENCE LISTING

DATE: 07/02/2004

PATENT APPLICATION: US/09/389,000A

TIME: 15:11:41

Input Set : D:\51158-20027.00 - SEQLIST.TXT

Output Set: N:\CRF4\07022004\I389000A.raw

4 <110> APPLICANT: Afar, Daniel E.
 5 Hubert, Rene S.
 6 Raitano, Arthur B.
 8 <120> TITLE OF INVENTION: PHELIX: A TESTIS-SPECIFIC PROTEIN
 9 EXPRESSED IN CANCER
 11 <130> FILE REFERENCE: 511582002700
 13 <140> CURRENT APPLICATION NUMBER: 09/389,000A
 14 <141> CURRENT FILING DATE: 1999-08-31
 16 <150> PRIOR APPLICATION NUMBER: 60/098,610
 17 <151> PRIOR FILING DATE: 1998-08-31
 19 <150> PRIOR APPLICATION NUMBER: 60/106,524
 20 <151> PRIOR FILING DATE: 1998-10-03
 22 <160> NUMBER OF SEQ ID NOS: 14
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 2128
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Homo sapiens
 31 <400> SEQUENCE: 1
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 33 tgtcttgtgc tctaagggtc tgaggggaaa gacgcgggag gtctctggcc tgacactatg 120
 34 aaggaagaga gaaactacaa cttcgacggg gtgagcacca accgcctgaa acagcagttg 180
 35 ctggaagaag tccgcaagaa gtagtgaatg gaaaaccctg tatgagacac aacttgaatt 240
 36 aaatgatgaa ctagaaaagc aaattgttta tctcaaggag aaagtggaaa aaatccatgg 300
 37 aaactcttca gatagactat cttctattcg tgtctatgaa cgaatgccag tggaatcctt 360
 38 aaacacatta cttaaacagc tagaagaaga aaagaagact cttgaaagtc aagtgaataa 420
 39 ctatgcactt aaactggaac aagaatcaaa ggcttaccag aagatcaaca atgaacgccg 480
 40 tacataccta gctgaaatgt ctcagggttc tgggtttacat caagtttcta aaaggcaaca 540
 41 ggtggatcaa ctgcctagga tgcaagagaa tctagtgaag acgcaaaaat agacatctta 600
 42 ttagttggag atgtcactgt gggctacctg gctgatactg tacagaaact atttgcaaac 660
 43 atagcagaag tcaccatcac catcagtgac acgaaggagg cagcagcgct tttggatgat 720
 44 tgcataattca acatggttct cttgaagggt ccttcttcac taagtgccga ggagctggaa 780
 45 gccatcaagt taattagatt tggcaaaaag aaaaatacac attcactgtt tgtttttata 840
 46 atccctgaaa attttaaagg ttgtatttca gggcatggaa tggatattgc ttttaactgaa 900
 47 cactgacaa tggaaaaaat gagtaatgtg gtaaaatact ggacaacatg tccctcaaac 960
 48 actgttaaga ctgaaaacgc aactgggcct gaagaacttg gattgcccct gcagagggtc 1020
 49 tacagcgaac acctgggata ttttctact gatctatttg cctgctctga atctttaagg 1080
 50 aatggcaatg ggcttgaatt aaatgcttcg ttgtcagagt tcgagaaaaa caaaaagatc 1140
 51 tctcttcttc attcaagcaa ggaaaaacta agaagggaaa gaatcaataa ttgctgtgag 1200
 52 cagctgcgta ctctcttgcc gtatgtaaaaa gggagaaaaga atgatgcggc ttcagttctt 1260
 53 gaggcaacag ttgattatgt gaaatatatc cgggagaaaa tctctccagc cgttatggcc 1320
 54 cagattacag aagcacttca gagcaacatg aggttttgta agaaacaaca aacaccatt 1380
 55 gagctgtctc tcccaggcac tgtcatggca cagcgggaaa acagtgtgat gagcacttac 1440

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56 tccccctgaga gagggctcca attcctgact aatacgtgct ggaatgggtg ctccactcct 1500
57 gatgcagaga gctccttggga tgaagctgtg agagttccat caagctccgc ctccagagaat 1560
58 gctattggtg atccatataa aactcacatt tccagtgcag cgctgtctct gaattccttg 1620
59 catactgtca gatattattc taaagtcacc ccttcctacg atgcaactgc tgtaacaaat 1680
60 cagaacattt caattcattt accttcagcc atgcccccg g tctcaagctt ctccctcggc 1740
61 actgcacttc tgggttgggc cagacgtgca ctacacatcc caactgtctg caacagtttt 1800
62 gggcgtatta aaagcacatg tttgaaattc acactctcaa ccacctactg ggcgcagttt 1860
63 gacaatctag gaaaagtggg acaaagaatg attttgaaag ctccacccaa agacctaata 1920
64 tcaaaagagt tggcatggtt tggcttctga taaatgcact caaagcttct gcagatagaa 1980
65 agaccagcag cgaaaaagct ggccacacac tgtcactcat cttcatacac acttggatcc 2040
66 ccgccagcca gagagctaca agaacaaatg gctcagtga cctacactct cttttctcaa 2100
67 aaaatattcc acaatttatg aaaaaaaa 2128

69 <210> SEQ ID NO: 2
70 <211> LENGTH: 405
71 <212> TYPE: PRT
72 <213> ORGANISM: Homo sapiens
74 <400> SEQUENCE: 2
75 Met Val Leu Leu Lys Val Pro Ser Ser Leu Ser Ala Glu Glu Leu Glu
76 1 5 10 15
77 Ala Ile Lys Leu Ile Arg Phe Gly Lys Lys Lys Asn Thr His Ser Leu
78 20 25 30
79 Phe Val Phe Ile Ile Pro Glu Asn Phe Lys Gly Cys Ile Ser Gly His
80 35 40 45
81 Gly Met Asp Ile Ala Leu Thr Glu Pro Leu Thr Met Glu Lys Met Ser
82 50 55 60
83 Asn Val Val Lys Tyr Trp Thr Thr Cys Pro Ser Asn Thr Val Lys Thr
84 65 70 75 80
85 Glu Asn Ala Thr Gly Pro Glu Glu Leu Gly Leu Pro Leu Gln Arg Ser
86 85 90 95
87 Tyr Ser Glu His Leu Gly Tyr Phe Pro Thr Asp Leu Phe Ala Cys Ser
88 100 105 110
89 Glu Ser Leu Arg Asn Gly Asn Gly Leu Glu Leu Asn Ala Ser Leu Ser
90 115 120 125
91 Glu Phe Glu Lys Asn Lys Lys Ile Ser Leu Leu His Ser Ser Lys Glu
92 130 135 140
93 Lys Leu Arg Arg Glu Arg Ile Lys Tyr Cys Cys Glu Gln Leu Arg Thr
94 145 150 155 160
95 Leu Leu Pro Tyr Val Lys Gly Arg Lys Asn Asp Ala Ala Ser Val Leu
96 165 170 175
97 Glu Ala Thr Val Asp Tyr Val Lys Tyr Ile Arg Glu Lys Ile Ser Pro
98 180 185 190
99 Ala Val Met Ala Gln Ile Thr Glu Ala Leu Gln Ser Asn Met Arg Phe
100 195 200 205
101 Cys Lys Lys Gln Gln Thr Pro Ile Glu Leu Ser Leu Pro Gly Thr Val
102 210 215 220
103 Met Ala Gln Arg Glu Asn Ser Val Met Ser Thr Tyr Ser Pro Glu Arg
104 225 230 235 240
105 Gly Leu Gln Phe Leu Thr Asn Thr Cys Trp Asn Gly Cys Ser Thr Pro
106 245 250 255

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107 Asp Ala Glu Ser Ser Leu Asp Glu Ala Val Arg Val Pro Ser Ser Ser
108           260           265           270
109 Ala Ser Glu Asn Ala Ile Gly Asp Pro Tyr Lys Thr His Ile Ser Ser
110           275           280           285
111 Ala Ala Leu Ser Leu Asn Ser Leu His Thr Val Arg Tyr Tyr Ser Lys
112           290           295           300
113 Val Thr Pro Ser Tyr Asp Ala Thr Ala Val Thr Asn Gln Asn Ile Ser
114 305           310           315           320
115 Ile His Leu Pro Ser Ala Met Pro Pro Val Ser Ser Phe Ser Leu Gly
116           325           330           335
117 Thr Ala Leu Leu Gly Trp Ala Arg Arg Ala Leu His Ile Pro Thr Val
118           340           345           350
119 Cys Asn Ser Phe Gly Arg Ile Lys Ser Thr Cys Leu Lys Phe Thr Leu
120           355           360           365
121 Ser Thr Thr Tyr Trp Ala Gln Phe Asp Asn Leu Gly Lys Val Glu Gln
122           370           375           380
123 Arg Met Ile Leu Lys Ala Pro Pro Lys Asp Leu Ile Ser Lys Glu Leu
124 385           390           395           400
125 Ala Trp Phe Gly Phe
126           405
129 <210> SEQ ID NO: 3
130 <211> LENGTH: 50
131 <212> TYPE: PRT
132 <213> ORGANISM: Rattus norvegicus
134 <400> SEQUENCE: 3
135 His Asn Ala Leu Glu Arg Lys Arg Arg Asp His Ile Lys Asp Ser Phe
136 1           5           10           15
137 His Ser Leu Arg Asp Ser Val Pro Ser Leu Gln Gly Glu Lys Ala Ser
138           20           25           30
139 Arg Ala Gln Ile Leu Asp Lys Ala Thr Glu Tyr Ile Gln Tyr Met Arg
140           35           40           45
141 Arg Lys
142           50
145 <210> SEQ ID NO: 4
146 <211> LENGTH: 24
147 <212> TYPE: PRT
148 <213> ORGANISM: Brachydanio rerio
150 <400> SEQUENCE: 4
151 His Asn Glu Leu Glu Lys Asn Arg Arg Ala His Leu Arg Leu Cys Leu
152 1           5           10           15
153 Glu Arg Leu Lys Thr Leu Ile Pro
154           20
157 <210> SEQ ID NO: 5
158 <211> LENGTH: 14
159 <212> TYPE: DNA
160 <213> ORGANISM: Artificial Sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: Primer
165 <400> SEQUENCE: 5

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166 ttttgatcaa gctt 14
168 <210> SEQ ID NO: 6
169 <211> LENGTH: 42
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: DNA Adaptor 1
176 <400> SEQUENCE: 6
177 ctaatacgac tcactatagg gctcgagcgg ccgcccgggc ag 42
179 <210> SEQ ID NO: 7
180 <211> LENGTH: 40
181 <212> TYPE: DNA
182 <213> ORGANISM: Artificial Sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: DNA Adaptor 2
187 <400> SEQUENCE: 7
188 gtaatacgac tcactatagg gcagcgtggt cgcgcccgag 40
190 <210> SEQ ID NO: 8
191 <211> LENGTH: 22
192 <212> TYPE: DNA
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: PCR Primer 1
198 <400> SEQUENCE: 8
199 ctaatacgac tcactatagg gc 22
201 <210> SEQ ID NO: 9
202 <211> LENGTH: 22
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial Sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: Nested primer (NP)1
209 <400> SEQUENCE: 9
210 tcgagcggcc gcccgggcag ga 22
212 <210> SEQ ID NO: 10
213 <211> LENGTH: 20
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Nested primer (NP)2
220 <400> SEQUENCE: 10
221 agcgtggtcg cggccgagga 20
223 <210> SEQ ID NO: 11
224 <211> LENGTH: 23
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial Sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: RT-PCR primer 22P4G9.1
231 <400> SEQUENCE: 11
232 ctgcgtactc tcttgccgta tgt 23

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Input Set : D:\51158-20027.00 - SEQLIST.TXT

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234 <210> SEQ ID NO: 12
235 <211> LENGTH: 24
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: RT-PCR primer 22P4G9.2
242 <400> SEQUENCE: 12
243 gctcaatggg tgtttggtgt ttct 24
245 <210> SEQ ID NO: 13
246 <211> LENGTH: 25
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: Primer
253 <400> SEQUENCE: 13
254 atatcgccgc gctcgtcgtc gacaa 25
256 <210> SEQ ID NO: 14
257 <211> LENGTH: 26
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: Primer
264 <400> SEQUENCE: 14
265 agccacacgc agctcattgt agaagg 26

VERIFICATION SUMMARY

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Input Set : D:\51158-20027.00 - SEQLIST.TXT

Output Set: N:\CRF4\07022004\I389000A.raw